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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,683

05/24/2006

Kadosa Hevesi

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2141

30448

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AKERMAN SENTERFITT

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EXAMINER

XU, LING X

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

12/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,683	Applicant(s) HEVESI, KADOSA	
	Examiner Ling Xu	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 18-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 18-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/12/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains more than one paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 18-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 9, it is unclear if the 6 mm clear soda-lime glass is the substrate.

In claim 18, see (D1), it is unclear if the spectral absorption index is higher than 0.8, 1 or 1.2. See (D2), it is unclear if the material of the absorbent layers can be any metal or metal selected from the specific metal as listed. The scope of the claim is unclear because of the phases "in particular", "further preferred", and "such as".

In claim 22, line 3, claim 22 depends on claim 1, since claim 1 recites soda-lime glass, it is unclear if "a 6 mm clear soda-lime glass" is a different glass from the glass recited in claim 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 18-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Coustet et al. (WO-02/48065, its US equivalent, US 2005/0123772, is used as the English translation).

Coustet discloses a transparent substrate provided with a stack of thin layers consisting of an alternation of n functional layers having reflection properties in the infrared and/or the solar radiation range and of n+1 coatings composed of one or more

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layers made of a dielectric, so that each functional layer is placed between two coatings. Coustet also discloses that at least one layer absorbent in the visible is inserted between two layers of dielectric of at least one of the said coatings (page 1, [0013]). The transparent substrate is made of 6 mm thick clear soda-lime glass (page 3, [0037]). The absorbent layer (or the absorbent layers) may be made of various materials: it may be a metal or a metal alloy of the Ti, Nb, Zr or NiCr type. It may also be a metal oxide, such as chromium oxide, iron oxide or a substoichiometric titanium; or a metal nitride, such as titanium nitride, niobium nitride, zirconium nitride, chromium nitride or NiCr nitride (page 1, [0017]). The dielectric layer may be silicon nitride and/or aluminum nitride (page 2, [0019]).

Since Coustet discloses the transparent substrate comprising the same layered structure as claimed, the same layered structure would also have the same properties as recited in claims 1 and 18-32.

4. Claims 1, 18-21, 26-27, and 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Decroupet (US 2004/0147185).

Regarding claims 1, 18-21, and 27, Decroupet discloses that a glass substrate coated with a stack of coating layers comprising (see example 4 and page 5, claims 1-13):

a) a first layer of antireflective layer comprising, for example, zinc oxide, tin oxide or titanium oxide (page 2, [0043]). These oxides are also dielectric materials.

Accordingly, the antireflective layer is also a dielectric material layer;

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- b) a first absorbing layer comprising metal such as tin or nickel chrome (page 2, [0042]);
- c) a first infrared reflective layer such as an Ag layer;
- d) an intermediate layer;
- e) a second absorbing layer comprising metal such as tin or nickel chrome (page 2, [0042]);
- f) a second antireflective/dielectric material layer comprising, for example, zinc oxide, tin oxide or titanium oxide (page 2, [0043]).

It should be noted that, in claim 18, according to the specification of the present application, on page 7, lines 1-10, the materials listed in (D2) also meets the requirement in (D1).

Since Decroupet discloses that same coated substrate as claimed, the same coated substrate would also have the same properties as recited in claims 1, 18, 26, and 29-32. For example, Decroupet discloses, in Example 4, that the properties such as light transmittance, reflection of visible light, colorimetric index a^* and b^* , and solar factor to be in the same range as claimed. Decroupet also discloses that the selectivity of the glazing panel to be in the same range as claimed (page 2, [0039]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-25 are rejected under 35 U.S.C.103(a) as being unpatentable over Decroupet, as applied to claim 1 above, and further in view of Isozaki et al. (US 4,888,210).

As stated above, Decroupet discloses the same transparent substrate as recited in claim 1. Decroupet also discloses that the substrate is a 6mm clear glass and the thickness of the Ag layer may be about 17nm (page 3, [0049]-[0056]).

Decroupet does not specify that the clear glass substrate is a soda-lime glass substrate. However, it is well known in the art that soda-lime glass is commonly used as transparent substrate. For example, Isozaki teaches the use of soda-lime glass as substrate because it is low cost and it can withstand high thermal decomposition temperature and/or heat treatment temperature (col. 2, lines 40-65).

Therefore, it would have been obvious to one of ordinary skill in the art to use soda-lime glass as the substrate because its low cost and rigid nature.

Since the combination of Decroupet and Isozaki discloses that same coated substrate as claimed, the same coated substrate would also have the same properties as recited in claim 22.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling Xu whose telephone number is 571-272-7414. The examiner can normally be reached on 8:00 am- 4:30 pm, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ling Xu
Primary Examiner
Art Unit 1794

/Ling Xu/
Primary Examiner, Art Unit 1794

Lx
December 9, 2008